

10 / 12. A scroll compressor comprising:

a first scroll member having a base and a scroll wrap extending from said base;

a second scroll member having a base and a scroll wrap interfitting with said first scroll wrap;

B4 a bi-directional rotary motor for driving said second scroll relative to said first scroll, said motor being driven in a forward direction and in a reverse direction, said motor being driven at a first speed in said forward and reverse directions; and

a planetary gear transmission mounted between a shaft and a motor rotor for driving said second scroll in said forward direction when said motor is driven in both said reverse and forward directions, and at a speed which approximates the speed of said motor when said motor is driven in said forward direction, and said transmission reducing the speed of movement of said second scroll when said motor is driven in said reverse direction.

B5 11 / 14. A scroll compressor as recited in Claim 12, wherein said planetary gear transmission is mounted between a shaft and an eccentric portion.

#### REMARKS

Claims 8 and 15 were objected to as depending upon a rejected base claim. Examiner indicated that claims 8 and 15 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 1 and 12 have been amended to include the of claims 8 and 15 respectively along with any intervening claims.

Applicant respectfully requests consideration of this amendment and submits that claims 1 and 12 are in allowable form, and that therefore this case is in condition for allowance. If the Examiner believes that a teleconference will facilitate moving this case forward to being issued, Applicant's representative can be contacted at the number indicated below.

Respectfully Submitted,

**CARLSON, GASKEY & OLDS, P.C.**



JOHN M. SIRAGUSA

Registration No. 46,174

Attorneys for Applicant

**CARLSON, GASKEY & OLDS, P.C.**

400 West Maple Road, Suite 350

Birmingham, Michigan 48009

(248) 988-8360

Dated: April 9, 2002

I hereby certify that these documents and fees are being deposited with the U.S. Postal Service as first class mail in an envelope addressed to "Assistant Commissioner of Patents, Washington, D.C. 20231" on April 12, 2002.



Stefanie R. Hernandez

**RECEIVED**

**APR 24 2002**

**OFFICE OF PETITIONS**

**APPENDIX 1**

1.(Amended) A scroll compressor comprising:

a first scroll;

a second scroll being driven for orbital movement relative to said first scroll;

a reversible electric motor, said motor being operable to be driven in one direction at a first speed of rotation and cause said orbiting scroll to cyclically orbit in a forward direction at a first rate which is approximately equal to said first speed, and said motor being operable to be rotated in an opposed direction at said first speed, said orbiting scroll being caused to move in said forward direction when said motor is driven in said opposed direction at a rate which is different from said first rate by a [mechanical] gear transmission, mounted between a motor rotor and a motor shaft, which varies the speed of said motor to said orbiting scroll.

[3. A scroll compressor as recited in Claim 1, wherein said mechanical transmission includes a gear transmission which varies the speed of said motor to said orbiting scroll.]

4. A scroll compressor as recited in Claim [3]1, wherein said gear transmission provides a gear reduction.

7. A scroll compressor as recited in Claim [3] 1, wherein said gear transmission is provided between a shaft portion and an eccentric mounted between said shaft and said orbiting scroll.

[8. A scroll compressor as recited in claim 3, wherein said gear transmission is mounted between a motor rotor and a motor shaft.]

12.(Amended) A scroll compressor comprising:

a first scroll member having a base and a scroll wrap extending from said base;

a second scroll member having a base and a scroll wrap interfitting with said first scroll wrap;

a bi-directional rotary motor for driving said second scroll relative to said first scroll, said motor being driven in a forward direction and in a reverse direction, said motor being driven at a first speed in said forward and reverse directions; and

a [mechanical] planetary gear transmission mounted between a shaft and a motor rotor for driving said second scroll in said forward direction when said motor is driven in both said reverse and forward directions, and at a speed which approximates the speed of said motor when said motor is driven in said forward direction, and said transmission reducing the speed of movement of said second scroll when said motor is driven in said reverse direction.

[13. A scroll compressor as recited in Claim 12, wherein said transmission includes a planetary gear transmission.]

14. A scroll compressor as recited in Claim [13] 12, wherein said planetary gear transmission is mounted between a shaft and an eccentric portion.

[15. A scroll compressor as recited in Claim 13, wherein said planetary gear transmission is mounted between a shaft and a motor rotor.]